Installation Instructions
Competition/Plus Short Throw Shifter
Fits: 2004-2006 GTO V8
Borg Warner T-56 Manual Transmission
HURST # 3915065

WORK SAFELY! For maximum safety, perform this installation on a clean, level surface and with the engine turned off. Place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction.

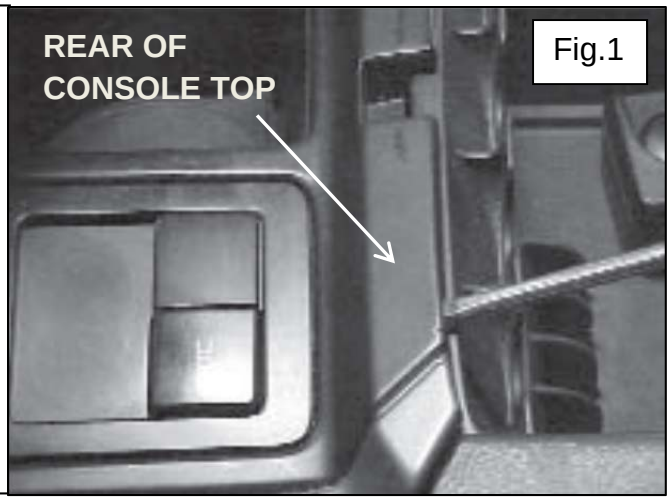
CAUTION: To avoid any possibility of bodily injury or damage to vehicle, do not attempt installation until you are confident that the vehicle is safely secured and will not move.

NOTE: This shifter has been primarily designed as a "race" shifter for competition use and while every effort to reduce transmission vibration and noise has been made, unlike the stock shifter, this was not the primary goal in design. IN SOME INSTANCES AND IN SOME VEHICLES, TRANSMISSION AND DRIVETRAIN NOISE AND VIBRATION MAY BE CHANGED AND/OR AMPLIFIED! If this possibility is objectionable in your goals and end purpose of modifying your vehicle, please return this product for a refund before proceeding any further with installation.

FACTORY SHIFTER REMOVAL

1. Using a Phillips head screwdriver, remove the screw located below the accessory door at the very front of the console.

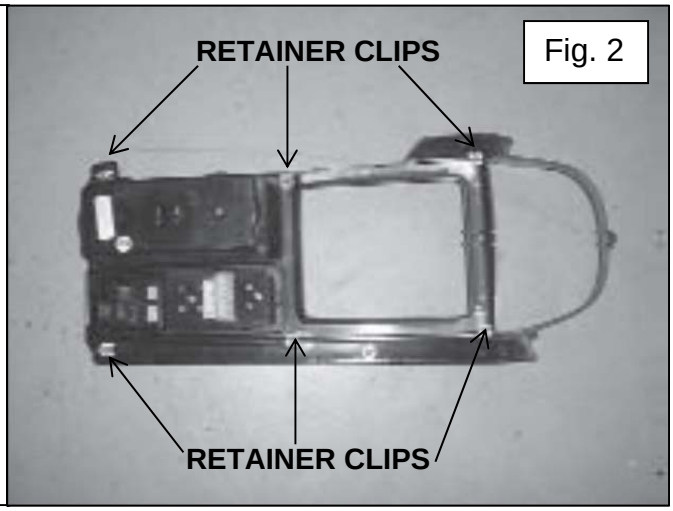
2. Open the rear console door and using a flat blade screwdriver, carefully pry up on the back of the console top to release the attachment retainer clips from the main console body (See Figure 1).



3. Grasp the sides of the console top and pull up at all edges to release the retainer clips from the main console body.

Note: There are 6-attachment retainer clips and moderate force may be required to release the clips (See Figure 2). Pull up evenly at retainer clip points to prevent cracking or damage to console top.

4. Unplug the electrical connector from the power window and traction control switches. Remove console top.



5. Grasp the edges of the shift boot plastic rim and pull up and out of console (See Figure 3).

Note: There are 7-attachment points securing this boot. Note their position when removing.

Fig. 3

Pull the boot up onto shift knob exposing the 2-bolts that fasten the shifter stick/knob assembly to the shifter itself (See Figure 4).

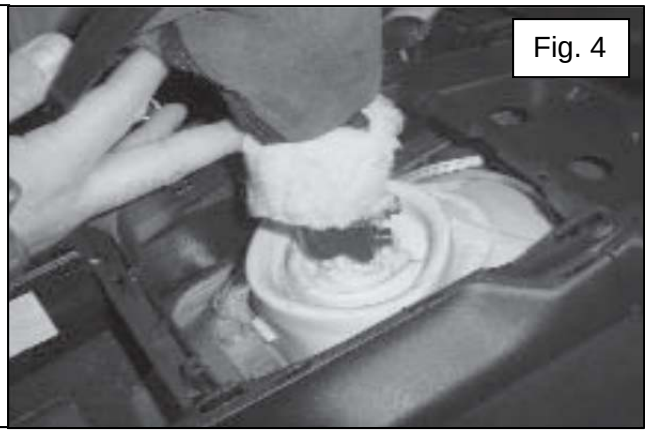


Fig. 4

6. Using a 10mm wrench, remove the 2-bolts and remove the shifter stick/knob and boot assembly.

7. From underneath vehicle, remove the 4-hex nuts located directly above the rear of the transmission tail shaft, which secure the factory rubber inner boot retainer to the floor pan tunnel.

Note: Access to this area is very tight and limited. You will need to use a 13mm open end wrench, socket, extension, universal swivel and ratchet for this procedure.

ALWAYS USE CARE AND CAUTION WHEN WORKING UNDERNEATH VEHICLE!

8. From inside the vehicle, remove the steel boot retainer and rubber boot by pulling up and off of the stock factory shifter (See Figure 5).

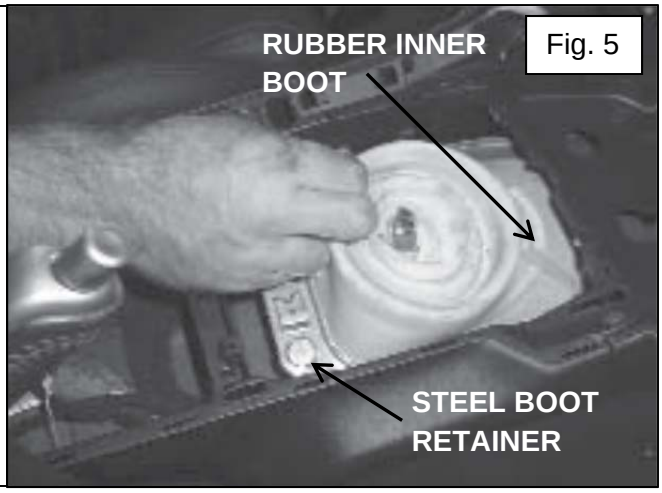
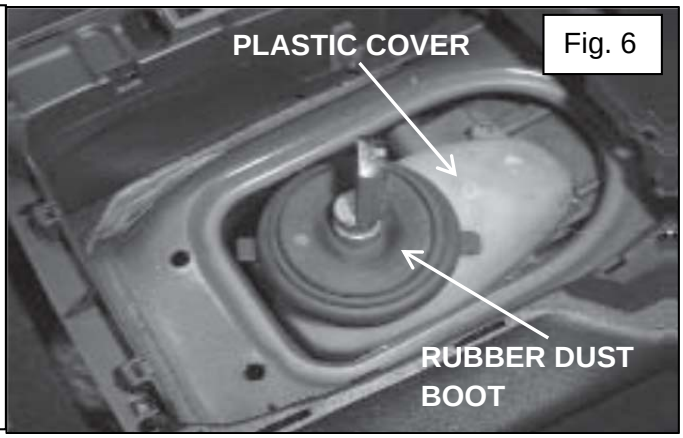


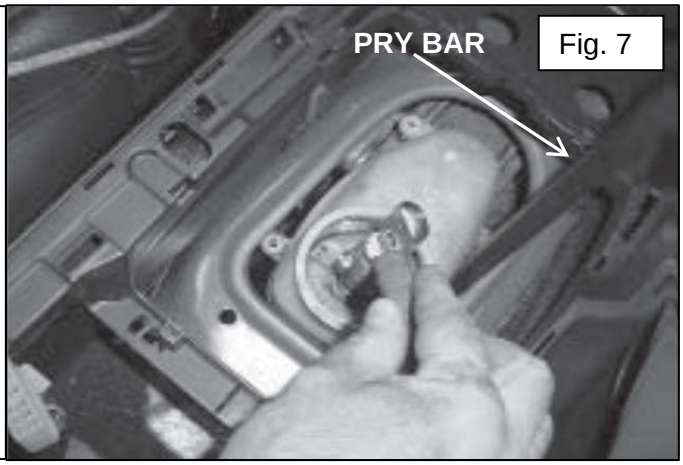
Fig. 5

9. Remove the small rubber dust boot from the plastic cover (See Figure 6).



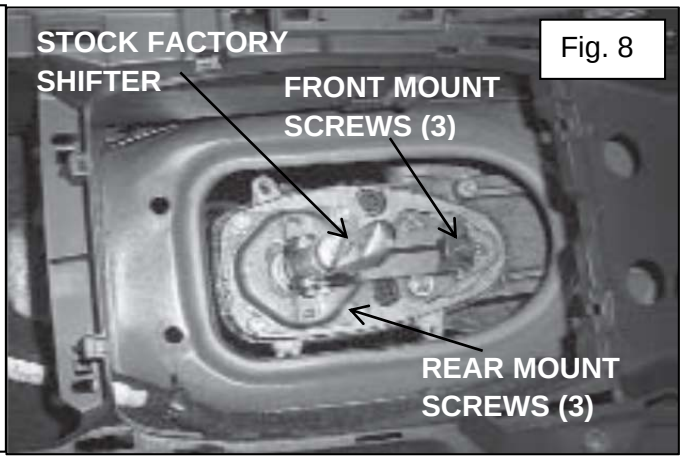
10. Using a T45 Torx head driver, remove the 4-screws that fasten the plastic cover to the transmission plate.

Note: The screws on the passenger side may be difficult to access. In this case, use a pry bar between the transmission and the edge of the opening in the floor tunnel and gently pry the transmission slightly over to the driver's side to allow access to the screws (See Figure 7). Be careful not to drop the screws as they are removed. Lift the plastic cover off of the stock factory shifter and set aside.



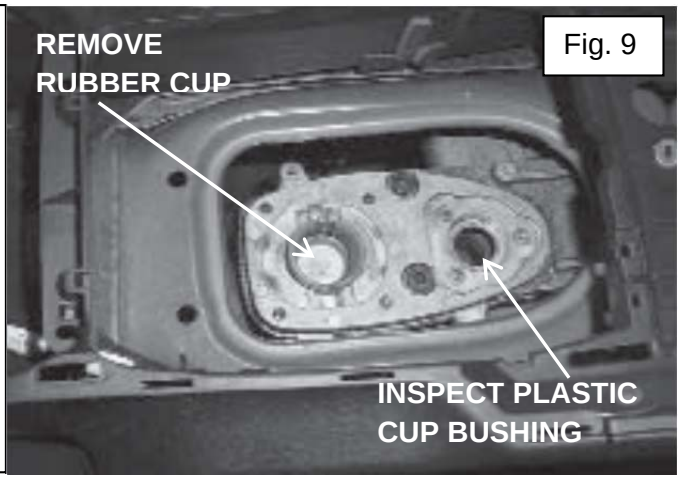
11. Using a 5/16" socket or wrench, remove the 3-hex head screws and flatwashers from the shifter front mounting plate. Set the screws aside for re-installation (See Figure 8).

12. Using a 3/8" socket, remove the 4-hex head screws from the shifter-mounting base. These screws WILL NOT be reused.



13. Remove factory shifter by pulling up and off of transmission. Remove rubber cup from rear of transmission plate (See Figure 9).

Note: Temporarily cover opening in transmission with a shop rag to prevent any debris from accidentally falling into opening.



HURST SHIFTER INSTALLATION

1. Lightly lubricate the two (2) O-rings (supplied) with silicone grease (supplied) and install both O-rings onto the underside of the shifter front mounting plate (See Figure 10).

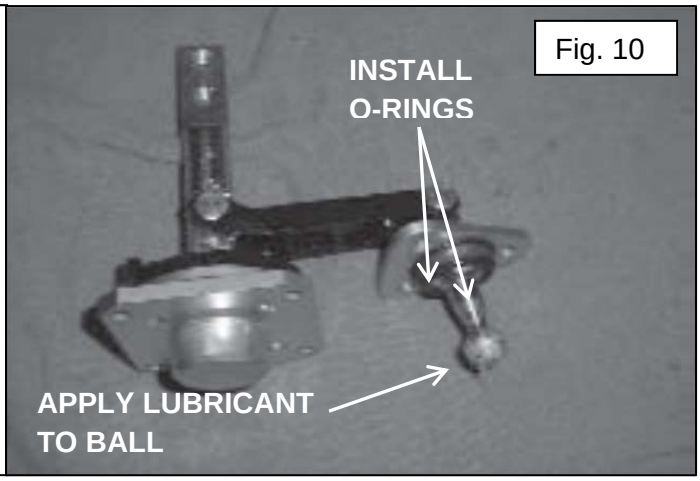


Fig. 10

2. Lubricate the ball on the bottom of the front shifter stick with silicone grease.

3. Inspect the plastic cup bushing located inside the transmission rail receiver to be sure that it is intact and not broken or damaged. Place the Hurst shifter onto the transmission plate making sure that the ball on the front stick bottom engages the plastic cup bushing and that the rear mounting base of the shifter sits down flush onto the transmission plate and all mounting bolt holes are aligned properly.

4. Clean the threads on the 3-front mounting screws previously removed and apply thread locker (supplied) to threads. Install into the front plate and tighten securely. It is not necessary to install the flat washers used with the stock factory shifter.
Caution: Use care to not over tighten as threaded holes for screws can strip and be damaged.

5. Apply thread locker to the 4-new hex socket screws (supplied) and install into the rear shifter mounting base. Tighten securely using a 3/16" hex key wrench.

6. Temporarily attach the Hurst chrome plated stick or OEM style black stick to the stick bottom with the two (2) 3/8-24 x 1" button head socket bolts supplied.
Note: Be sure that the stick engages serrations on stick bottom. Tighten bolts only snug, as you will need to remove the stick after the next step.

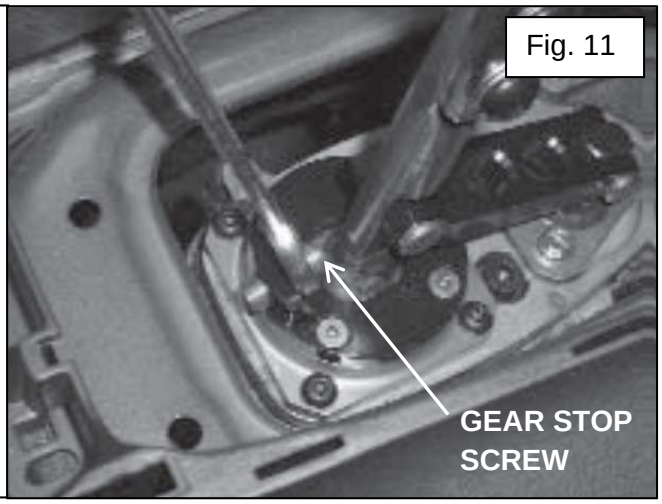
IMPORTANT! Check operation of shifter for interference or binding. Move stick through entire gearshift pattern making sure it engages each gear fully and that stick moves freely from side to side in "neutral" position.

Note: During this procedure, be sure that shifter stick does not hit "gear stop screw" located on top of shifter plate at rear.

GEAR STOP SCREW ADJUSTMENT

CAUTION!: After extensive testing with various race teams, as well as continuing development with the original transmission engineering group, Hurst has determined that the "gear stop" feature is redundant on most series of Tremec transmissions. Because of this, Hurst is phasing out the use of "gear stops" on Tremec as well as some other types of transmissions. If you feel that your style of driving requires the use of gear stops, then install the supplied threaded stop and nut and ***adjust exactly as described below or internal transmission damage could occur!***

Pull shifter firmly into 2nd gear making sure that the gear has been FULLY engaged and hold securely. Apply a small amount of thread locker to gear stop screw threads. Turn stop screw in until head contacts stick, then rotate screw one half turn out (away from the stick) and tighten jam nut using a 9/16” wrench (See Figure 11).

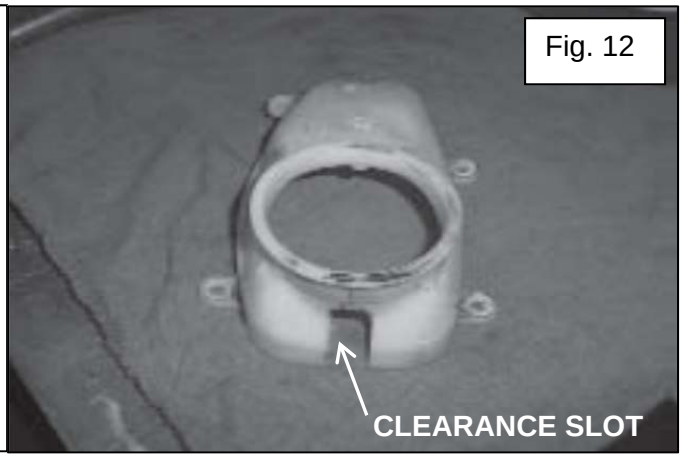


7. Remove the top stick from the shifter.

8. Insert the 4-steel sleeves into the foam gasket (supplied) and place gasket over the shifter and onto transmission plate. Align holes in the gasket with mounting holes in the transmission plate.

9. Modify the rear of the factory plastic cover to allow clearance for gear stop screw (See Figure 12). Use a hacksaw blade to cut a small slot in the cover.

Caution: Use care to avoid personal injury or damage to cover when cutting.



10. Place modified cover over shifter onto foam gasket and fasten with 4-hex socket screws (supplied). Tighten using a 5/32” hex key wrench.
Note: Tighten screws snuggly but use care to not over tighten.

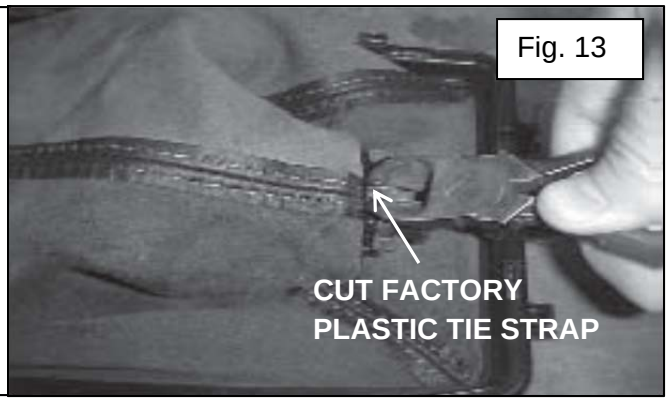
11. Replace small rubber dust boot previously removed onto plastic cover.

Note: the supplied rubber boot and retaining ring can be used in addition and/or in place of the original dust boot to insulate noise and vibrations.

12. Slide the factory rubber inner boot and retainer ring over the shifter and plastic cover, aligning the retainer studs with holes in the floor pan tunnel. From underneath the vehicle, replace the 4- hex head nuts previously removed and tighten securely.

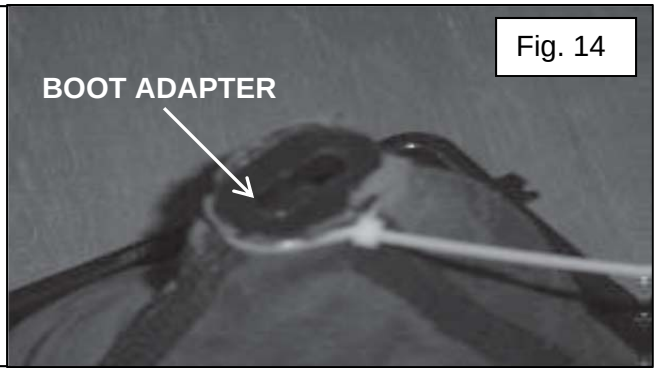
13. Re-attach the top stick to the shifter stick with the two (2) 3/8-24 x 1” button head socket bolts and star tooth lock washers. Be sure that the top stick engages serrations on stick bottom. Tighten the bolts 30-35 ft. lbs. torque using a 7/32” hex key wrench.

14. If using the Hurst style stick and knob, place the factory shifter knob, boot and handle onto the workbench. Turn the shift boot inside out and carefully cut the plastic tie strap that secures the boot to the shift handle (See Figure 13). Slide the boot off of the shifter handle.



15. With the boot turned inside out, insert the supplied boot adapter into the factory boot making sure the boot edges fit into the groove of the adapter. Secure with the plastic cable tie supplied and cut excess material off of cable tie (See Figure 14).

Caution: Do not distort opening in boot adapter by overtightening or it will not fit properly onto the Hurst chrome plated stick.



16. Slide the factory boot and adapter onto the Hurst chrome plated stick and carefully insert the retainer tabs into their respective positions in the console base making sure that the boot is held firmly in place.

17. Replace the console top by reconnecting the electrical plugs to the power window and traction control switches. Open the rear console door. Starting at the front, align the retainer clips with their respective slots in the console base and carefully begin pushing the console top into place until all the retainers snap firmly into place. Replace the front retainer screw previously removed.

18. Install the Hurst shifter knob onto the stick, turn to correct position and tighten the jam nut against the knob using a 9/16” open end wrench.

IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

Technical Service

A highly trained technical service department is maintained by Hurst Performance to answer your technical questions, provide additional product information and offer various recommendations.

Technical service calls, correspondence, and warranty questions should be directed to:

Hurst Performance Products

(707) 544-4761

www.Hurst-Shifters.com